#### **Defining the Range of Alternatives for BDCP Draft EIR/EIS**

June 15, 2010 -BECT Presentation

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Advancing the Bay Delta Conservation Plan

JUNE 15, 2010









#### **Overview of Presentation**

- Identification of Lead Agencies of the EIR/EIS
- Identification of Initial Alternative Concepts
- Development and application of screening criteria
- Range of alternatives to be evaluated in detail in the BDCP Draft EIR/EIS

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### **EIR/EIS Lead Agencies**

- CEQA Lead Agency
  - California Department of Water Resources

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- NEPA Lead Agencies
  - Bureau of Reclamation
  - U.S. Fish and Wildlife Service
  - National Marine Fisheries Service

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# Identification of **Initial Alternative Concepts**

- Concepts in the Notice of Preparation and Notice of Intent
- Concepts identified during Scoping Process
  - Over 1,051 comments related to alternatives
  - Requests to include concepts described in 2007 and 2008 reports by Public Policy Institute of California
  - Request to include concepts presented to the Delta Vision Blue Ribbon Task Force
- Concepts included in BDCP Steering Committee handouts over past four years

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# All Initial Alternative Concepts include Three Components

- Restoration Components
- Measures to Reduce Other Stressors Components

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- Conveyance Components
  - Isolated Conveyance
  - Dual Conveyance
  - Through Delta Conveyance

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#### **Isolated Conveyance Concepts**

- Central Delta Pipeline/Tunnel
- Eastern Unlined and Lined Canal
- Eastern Unlined Canal plus connection to San Joaquin River near Mossdale
- Eastern Unlined Canal plus connection to EBMUD and SFPUC
- Western Unlined and Lined Canal
- Western Unlined Canal plus use of Sacramento Deep Water Ship Channel
- Eastern Foothill Unlined Canal from Sacramento River near Verona

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#### **Dual Conveyance Concepts**

- Central Delta Pipeline/Tunnel
- Eastern Unlined and Lined Canal
- Eastern Unlined Canal plus connection to San Joaquin River near Mossdale
- Western Unlined and Lined Canal
- Western Unlined Canal plus use of Sacramento Deep Water Ship Channel
- Eastern Foothill Unlined Canal from Sacramento River near Verona

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#### **Through Delta Conveyance Concepts**

- Continued use of existing water supply systems
  - Levee armoring and new setback levees along South Fork Mokelumne and Middle rivers and Victoria Canal
  - Manage Delta for habitat, not local or SWP/CVP water supplies
- Separate Corridors
  - Water supply corridor along Mokelumne and Middle rivers and fish movement corridor along Old River
- Use of existing water supply systems with Delta salt water barrier installed near Benicia Bridge

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## Multiple-Step Screening Criteria Process

- First and Second Screening Levels
  - Defining alternatives under CEQA and NEPA
- Third Screening Level
  - Defining "potentially feasible alternatives" under CEQA and "reasonable alternatives" under NEPA
- Consideration of Sacramento-San Joaquin Delta Reform Act requirements
- Consideration of criteria identified by CEQA responsible agencies and NEPA cooperating agencies raised during scoping

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# **CEQA Responsible or Trustee Agencies**

- California Department of Fish and Game
- California Department of Parks and Recreation
- California State Water Resources Control Board
- California Air Resources Control Board
- California Department of Boating and Waterways
- California Department of Transportation
- California State Lands Commission
- San Francisco Bay Conservation and Development Commission

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# **NEPA** Cooperating Agencies

- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- State and Federal Contractors Water Agency

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### First and Second Screening Levels

- First Screening Level
  - Could the potential alternative concept meet the project's purpose/objectives in Notice of Preparation and Notice of Intent?
- Second Screening Level
  - Under CEQA, consider: Would the potential alternative avoid or substantially lessen any of the expected significant environmental effects of the proposed project?
  - Under NEPA, consider: Would the potential alternative address one or more significant issues related to the proposed action?

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#### Third Screening Level

- Could the potential alternative concept be "feasible" under CEQA?
  - Capable of being accomplished in reasonable time period taking into account economic, legal, social, and technological factors?
- Could the potential alternative concept be "reasonable" under NEPA?
  - Practical or feasible from technical or economic standpoint?

CEQA and NEPA allows consideration of a reasonable balance of environmental, economic, social, and technical factors and legal feasibility under species protection and other laws

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# Consideration of Sacramento-San Joaquin Delta Reform Act

- Do alternatives provide a reasonable range of:
  - Flow criteria? Diversion rates?
  - Other operational criteria to satisfy the criteria of approval as a Natural Community Conservation Plan?
  - Hydrologic conditions?
- Does the range of alternatives include a:
  - Through Delta Conveyance alternative?
  - Dual Conveyance alternative?
  - Isolated Conveyance alternative?
  - Dual or Isolated Conveyance Lined Canal alternative?

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- Dual or Isolated Conveyance Unlined Canal alternative?
- Pipeline/Tunnel Conveyance alternative?

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# Consideration of Responsible/Cooperating Agencies Scoping Comments

- Does range of alternatives include:
  - Broad range of water quality objectives and operational strategies?
  - Potential interim changes to SWRCB Bay-Delta Water Quality Control Plan?
  - Long-term changes to SWRCB Bay-Delta Water Quality
     Control Plan with and without new conveyance facilities?
  - Reduced diversions lower than diversions allowed in USFWS and NMFS biological opinions to assure continued existence of the species and some level of rehabilitation for estuary?
  - Delta outflows, and potentially inflows, that reflect a more natural hydrograph than current SWRCB Bay-Delta Water Quality Control Plan?

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#### Development of Range of Alternatives to be **Evaluated in Detail in Draft EIR/EIS**

- Applied the screening criteria to the range of alternative concepts to identify the alternatives for Draft EIR/EIS
- All alternatives in Draft EIR/EIS address conveyance, capacity, operations, restoration, and other stressors components

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### Array of Alternatives to be Evaluated in Detail in Draft EIR/EIS as of June 15, 2010

| ALTERNATIVE  | CONVEYANCE<br>ALIGNMENT   | OPERATIONAL<br>CRITERIA                                | NORTH DELTA<br>DIVERSION CAPACITY<br>(cfs) | RESTORATION AND<br>OTHER STRESSORS<br>CONCEPTS            |
|--|---|--|--|---|
| Alternative 1 – Dual<br>Conveyance                                   | Pipeline/Tunnel East Unlined East Lined West Unlined West Lined | Per BDCP Proposed<br>Project (2/11/10 BDCP<br>Handout) | 15,000                                     | Per BDCP Proposed<br>Project (3/25/10 BDCP<br>Handout)    |
| Alternative 2 – Dual<br>Conveyance                                   | Pipeline/Tunnel   | Same as Alternative 1                                  | 6,000                                      | Same as Alternative 1                                     |
| Alternative 3 – Isolated<br>Conveyance                               | Pipeline/Tunnel East Unlined East Lined West Unlined West Lined | Similar to Alternative 1<br>with Fall X2               | 15,000                                     | Same as Alternative 1                                     |
| Alternative 4 – Dual<br>Conveyance: Enhanced<br>Aquatic Conservation | Pipeline/Tunnel   | Modified from Alternative 1                            | To be Determined                           | Similar to Alternative 1<br>with Increased<br>Restoration |
| Alternative 5 – Through<br>Delta Conveyance:<br>Separate Corridors   | Through Delta Channel<br>Modifications                          | Modified from Alternative 1                            | 15,000                                     | Same as Alternative 1                                     |

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#### **Next Steps**

- Impact assessments will begin to identify potential adverse impacts and related mitigation measures
- The array of alternatives is preliminary and subject to change based upon information developed/reviewed during impact assessment

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